

**Dwight D. Eisenhower Mathematics and Science
Education--Regional Consortia Program
(CFDA No. 84.168)**

I. Legislation

Elementary and Secondary Education Act of 1965 as amended by Title XIII, Part C of the Improving America's Schools Act of 1994 (20 U.S.C. 8671) (expires September 30, 1999).

II. Funding History

<u>Fiscal Year</u>	<u>Appropriation</u>
1992	\$12,000,000
1993	13,590,000
1994	13,871,000
1995	15,000,000
1996	15,000,000

III. Analysis of Program Performance

A. Goals and Objectives

The purpose of the Regional Consortia Program is to disseminate exemplary mathematics and science education instructional materials and provide technical assistance in the implementation of teaching methods and assessment tools for use in elementary and secondary schools. (Prior to the 1994 reauthorization, the program was known as the "Eisenhower Mathematics and Science Regional Consortiums Program.")

B. Strategies to Achieve the Goals

Services Supported

The regional consortia are authorized to provide a variety of services to support systemic reform in math and science education. Examples of those services are as follows:

- Provide technical assistance to help states adopt world-class standards in mathematics and science education, formulate curriculum frameworks, and develop and implement new forms of assessment and teacher in-service and preservice education consistent with these standards and frameworks.
- Identify and disseminate information regarding informal mathematics and science education activities and programs and exemplary mathematics and science education materials, teaching methods, and assessment tools for use in elementary and secondary schools.
- Train and provide technical assistance to classroom teachers, administrators, and other educators to adapt and use the curriculum frameworks, educational materials, teaching methods, assessment tools, and educational technology.

- Work with the other regional consortium and with the Eisenhower National Clearinghouse; all consortia are to maintain on-line computer communications with the other consortia and with the clearinghouse.

C. Program Performance—Indicators of Impact and Effectiveness

The performance indicators for the Eisenhower Regional Consortia Program are still under development. Final indicators are planned for summer or fall 1997.

IV. Planned Studies

During FY 1993 the Department of Education began a congressionally mandated evaluation (P.L. 103-382, Title XIII, Part C, Section 13306) of the Regional Consortia Program. The purpose of the evaluation is to examine the extent to which the program is contributing to systemic reform in mathematics and science education.

The first report, *Evaluation of the Dwight D. Eisenhower Mathematics and Science Regional Consortia Program: First Interim Report*, was released in 1996 (V.2.). The final report will be available in late 1997 (V.3.). The final report will address the quality and effectiveness of regional consortium services.

The evaluation is part of a larger effort by the Department to examine the contributions of both the Eisenhower Mathematics and Science Education State Curriculum Frameworks Projects and Eisenhower Regional Consortia Program to systemic reform and improvement in math and science education. The evaluation is being conducted in collaboration with the National Science Foundation's (NSF) evaluation of its Statewide Systemic Initiatives (SSI) Program and the study of state curriculum frameworks in math and science by the Council of Chief State School Officers. The purpose of this collaboration is to develop a comprehensive perspective across education reform efforts, as well as to avoid duplication of efforts.

The *First Interim Report* (V.2.) discusses the efforts of the consortia to build working relationships and develop their own niche, within the program's broad mandates from Congress and the Department, given the many activities already under way in the regions when the consortia began. The report points out that many of the initial consortia's efforts have focused on process, such as convening meetings, as they have attempted to establish an active role in reform.

In the *First Interim Report*, the evaluators identified six principal categories of consortia activities:

1. **Professional development.** The consortia provided their own professional development and supported professional development conducted by others. The professional development included long-term and short-term activities. Typically, the consortia provided little direct follow-up support, but the evaluation did find some examples of successful leveraging of follow-up support by the consortia.
2. **Support for state teams and regional networks.** Convening groups and building state and regional networks were major activities of the consortia. They provided funding and staff support and facilitated meetings. In some cases, the groups collaborated on projects; in others, the focus was on the actual process of forming the group.

3. **Task-specific assistance.** The consortia have provided individual services to state and regional groups and to some school districts and schools, including assistance to Eisenhower State Curriculum Frameworks and SSI projects. The consortia have used this opportunity to showcase what they have to offer and to build working relationships. Some of the consortia services have focused substantively on math and science education, such as work on curriculum frameworks, instructional practices, and assessment. Other task-specific assistance from the consortia has focused on process, such as facilitating meetings and helping to plan projects.
4. **Dissemination:** The consortia have worked together to identify and disseminate examples of promising practices in math and science education. They have used technology to develop electronic databases and establish technology demonstration sites in collaboration with the Eisenhower National Clearinghouse. In addition, the consortia have produced and disseminated their own newsletters and a small number of other products.
5. **Purchasing materials and equipment.** To support school efforts to improve math and science education, the consortia have provided funds to purchase materials and equipment, including computer hardware, software, and accounts for access to the Internet. Although information is limited on the use and impact of this activity, it appears to benefit very small numbers of people in few sites.
6. **Networking among the Consortia.** Directors began meeting early on to develop a national network among the consortia and the Eisenhower National Clearinghouse to support education reform in math and science. Much of the collaboration has focused on working with the clearinghouse to identify and disseminate information about promising practices.

While the *First Interim Report* provided an overview of the role and early operations of the Eisenhower Regional Consortia, the final report will focus on the effectiveness and quality of selected consortium activities in professional development, support for teams and networks, dissemination of promising practices, the use of technology, and the networking and cooperating efforts of the consortia. These areas of consortium activities and services were selected because of their prominence in the consortia's portfolios at the design phase of this part of the evaluation. Data collected for the final report draw heavily on participants in the consortium activities (V.3.).

The final report will be available in late 1997. Preliminary findings indicate the following about consortia activities:

- **Professional Development.** Participants in professional development generally praised the consortia not only for the quality of the offerings but also for the contributions to skills, knowledge, and changes in behavior. Participants identified three specific areas where changes in behavior were prevalent: individual professional practice, communication with others, and organizational policies or practices.
- **Support for Teams and Networks.** Consortia have convened and supported teams and networks to establish links to the field and to provide opportunities for educators to work together on common tasks. Members of these groups include individuals from colleges and universities, state education agencies, local school districts, and other organizations. Many are grantees of federally funded programs, such as the Statewide Systemic Initiatives (SSI) Program and State Curriculum Frameworks Projects, and most are involved in mathematics and science education.

Members of teams and networks value these groups for providing opportunities to open new lines of communication with people whom they otherwise might not meet, to discuss important issues, and to forge new working relationships within their States and across regions.

- **Promising Practices.** The consortia successfully disseminated *Promising Practices in Mathematics and Science Education*, a publication developed during the first grant period which focused on innovative programs and practices with the potential for replication in other settings.
- **Use of Technology.** In general, the consortia have gone beyond their mandate and are using technology in a variety of ways to further the goals of the program. For example, all consortia have established World Wide Web sites, but the sites vary in sophistication and the amount of information they contain. Some consortia facilitate the work of teams, networks and other groups by establishing and maintaining electronic networks among the members.
- **Networking and Coordination.** Cross-consortia task forces that develop products for use by all help the consortia achieve economies of scale and allow them to capitalize on the strengths of individual consortia. Current efforts to develop a reporting system and an indicator system for the Regional Consortia Program have the potential to build the consortia's capacity to assess the quality and impact of their activities and services.

In addition to the information obtained from the national evaluation, grantees are required to submit annual performance reports to the Department on the consortia's progress toward achieving objectives.

V. Sources of Information

1. Program files and program abstracts.
2. M. Bruce Haslam, Kelley Colopy, Brenda J. Turnbull, with the assistance of Lee Anderson, Daniel C. Humphrey, Camille Marder, and Patrick M. Shields, Evaluation of the Dwight D. Eisenhower Mathematics and Science Regional Consortia Program: First Interim Report (Washington, D.C.: Policy Studies Associates and SRI, International, 1996).
3. Evaluation of the Dwight D. Eisenhower Mathematics and Science Regional Consortia Program: Final Report (Washington, D.C.: Policy Studies Associates and SRI International, forthcoming).

VI. Contacts for Further Information

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